

REMARKS/ARGUMENTS

Claims 1, 7 and 10 are active.

The non-elected method claims 13-19 have been cancelled.

Claim 1 is amended to define the abrasive material as diamond (see prior claim 6) and that the outer layer is titanium and copper OR titanium and tungsten (see prior claim 11).

Support for the definitions of the metals of the inner and outer layers can be found on page 2, last paragraph; on page 3, fourth paragraph; page 6, line 3; and the Examples on pages 7-9.

No new matter is added.

As apparent from the claims presented here, the coated super-hard abrasive comprises two layers, an inner and outer, each defined by the metal, alloys or carbides as specified in claim 1. Thus, the outer layer is an alloy of two metals Ti with Cu or WC.

The rejections of Claims 1, 6, 7, and 10-11 under 35 USC 102(b) or Claim 3 under 35 USC 103(a) in view of EP 0 532 261 with Moriguichi is traversed. Claim 3 has been cancelled and therefore this rejection is no longer applicable.

To the remaining claims and the 102(b) rejection, EP '261 describes coated cubic boron nitride abrasive (see Abstract, page 2, lines 23-50 and page 3, line 12) but not diamond super-hard abrasive materials as is claimed. Withdrawal of the rejection is requested.

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The rejection under 35 USC 103(a) citing Chen is respectfully traversed.

While Chen discusses a coated diamond wherein the coating comprises an inner refractory layer and an outer metal layer, the examples do not teach or support such a coated diamond. Chen does not describe an outer layer comprising a combination of titanium with copper or tungsten. Rather, Chen's outer layer, in contact with the inner carbide layer is a single metal, tungsten in all of the examples.

Providing this combination of metals in the outer layer is what is described in the Examples (pages 6-8) and provides has several advantages. The ability to achieve simultaneous compatibility with the underlying layer and the matrix of the tool in which the coated abrasive is to be used is increased. Grading from one composition to another composition can overcome incompatibilities between the underlying layer and the matrix. Tailoring the layer to minimize diffusion of the matrix through the coating is also possible. The chemical resistance of the coating can also be improved. (see page 6. first paragraph).

Withdrawal of the rejection is requested.

The rejections under 112, 2<sup>nd</sup> paragraph are no longer applicable.

Claim 1 has been amended as suggested in the Action to provide "wherein the metal of the carbide layer . . ." and the outer layer is defined as comprising titanium with copper or tungsten.

Claim 3 is cancelled.

Claim 10 has been amended to remove nitride, boride or boronitrides.

Claim 11 is cancelled.

Withdrawal of the rejection is requested.

Applicants request that the provisional rejections under the doctrine of obviousness type double patenting in view of co-pending application no. 10/586,394 (combined with (A) EP 532261; or (B) EP '261 and Moriguichi) be held in abeyance since the alleged conflicting claims have not yet been patented. Further, Applicants note the following from MPEP § 822.01:

The "provisional" double patenting rejection should continue to be made by the examiner in each application as long as there are conflicting claims in more than one application unless that "provisional" double patenting rejection is the only rejection remaining in one of the applications. If the "provisional" double patenting rejection in one application is the only rejection remaining in that application, the examiner should then withdraw that rejection and permit the application to issue as a patent, thereby converting the "provisional" double patenting rejection in the other application(s) into a double patenting rejection at the time the one application issues as a patent.

Reconsideration and allowance of the claims of this application is requested.

Respectfully submitted,

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